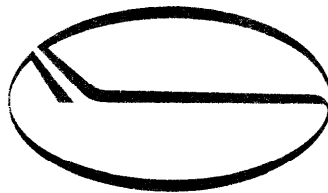


69180



Air Transport Association

DEPT. OF TRANSPORTATION
DOCKETS

99 DEC 20 PM 12: 20

December 16, 1999

U.S. Department of Transportation Dockets
Docket No. [FAA- 1999-6482]
400 Seventh Street, SW
Room Plaza 401
Washington, DC 20590

Reference: Docket No. FAA- 1999-6482, Notice No. 99-19, Revisions to Digital Flight Data Recorder Regulations for Boeing 737 Airplanes and for Part 125 Operations

Ladies/Gentlemen:

Pursuant to 14 CFR § 11.29(c), the Air Transport Association of America (ATA), on behalf of its member airlines', petitions the Administrator to extend the time allowed for the submission of comments in the case of Docket Number FAA- 1999-6482. This extension is requested in order to develop a reliable estimate of the time that will be required to design, certificate, provision and retrofit the proposed modifications using a comprehensive Service Bulletin.

On November 18, 1999, the Federal Aviation Administration issued a Notice of Proposed Rulemaking (NPRM) which, if adopted, would require that three new parameters be integrated with the Flight Data Recorder (FDR) of B737 airplanes. The new parameters would be an addition to those required, under 14 CFR § 121.344, to be integrated by August 20, 2001. Specifically, the proposal would require that all B-737 airplanes be equipped to record the parameters listed in § 121.344 (a)(1) through (a)(22), and (a)(88), plus the three new parameters, which would be designated as (a)(89) through (a)(91). The three new parameters are yaw damper status, yaw damper command, and standby rudder status. In addition, the required sampling rate of parameter (a)(88), "control force", would be doubled for B-737 airplanes. In B737s that were not equipped with a Flight Data Acquisition Unit (FDAU) on July 16, 1996, compliance would be required by August 20, 2001. In B737s that were FDAU-equipped on July 16, 1996, compliance would be required by August 18, 2000. The NPRM states that comments to the Docket must be received by December 20, 1999.

^{1/}ATA Members: Airborne Express, Alaska Airlines, Aloha Airlines, America West Airlines, American Airlines, American Trans Air, Atlas Air, Continental Airlines, Delta Air Lines, DHL Airways, Emery Worldwide, Evergreen International, Federal Express, Hawaiian Airlines, Midwest Express Airlines, Northwest Airlines, Polar Air Cargo, Reeve Aleutian Airways, Southwest Airlines, Trans World Airlines, United Airlines, United Parcel Service, US Airways.

ATA Associate Members: Aeromexico, Air Canada, Canadian Airlines International, KLM Royal Dutch Airlines, Mexicana.

Affected ATA member airlines have initiated, with the Original Equipment Manufacturer (OEM), the development of a plan for retrofitting the proposed modifications into in-service airplanes. We believe that the best approach would be based on a "generic" Service Bulletin, developed in coordination with the original system integrator, that would, to the greatest extent possible, apply to all 1,224 of the applicable B737 airplanes. Currently, these airplanes are subject to one of three distinct sets of **parameter** requirements under CFR 121.343, each having unique upgrade requirements under CFR 121.344, and each posing unique retrofit challenges under the proposed Rule. In order to accomplish upgrades required under CFR 121.344 (which are currently in progress) and previous upgrades under CFR 121.343, many airplanes have been modified under Supplemental Type Certificates (STC). A comprehensive technical assessment of the proposed modifications is required to address numerous airplane configurations and their requirements, and to achieve an acceptable degree of confidence in estimates of the scope and impact of the proposed Rule. The development of a generic Service Bulletin would, as a matter of course, include a credible assessment. Discussions with the OEM to date have resolved that the Bulletin should include: common elements and hardware; interface definitions for avionics racks; all new sensor systems that are required under the NPRM or CFR 121.344; interface definition/target for data frames, optional use of the ARINC 717 data standard, and optional use of a data-loadable/ programmable Digital FDAU; and 100 percent coverage of in-service B737s. A generic bulletin approach would minimize the overall time and resources required for design, approval, certification and provisioning of service instructions, any required supplemental instructions, and the associated Supplemental Type Certificates (STC) which some planes will require. The most expeditious method to achieve the first retrofit of a B737 in accordance with the proposal may be pursuit of design and certification under a STC. However, a generic Service Bulletin would produce a more standardized FDR system configuration among in-service airplanes, provide system growth capabilities, reduce the impact of any future changes to FDR Rules, and allow the most expeditious retrofit of the entire B737 inventory including foreign operators.


Significantly, discussions with the OEM indicate that compliance within the proposed periods does not appear to be achievable. The OEM's highly preliminary and aggressive estimate indicates that a generic retrofit Service Bulletin could be developed, approved and validated by mid-December, 2000; four months after the end of the proposed compliance period for FDAU-equipped planes. This estimate also may be considered representative of the amount of time that STC applicants would require to develop and validate their designs. However, concern exists that in the absence of a generic Bulletin, the subsequent amount of time that would be required to certificate and provision an array of independent STCs, each covering all design aspects of the proposed modifications, would extend the overall time required to retrofit all B737s. Production line assessments also indicate difficulty with the compliance periods. To date, the OEM has not been able to commit to a date for the first delivery of the proposed modification in a new production airplane, and has not stated that the proposed compliance period for newly delivered B737s can be met. After liaison with its suppliers, the OEM has not

been able to provide operators with an estimate of parts availability to support the production line or a retrofit of in-service airplanes. Since preliminary schedule estimates do not project compliance within the proposed periods, we propose that additional time be allowed to refine a more definitive retrofit plan.

The ATA petitions the Administrator for an extension of the 30-day comment period for Docket No. FAA-1999-6482 until January 31, 2000. The extension is requested in order to realistically assess the amount of time required to develop, approve, and adequately support a generic Service Bulletin, certificate associated STCs, and retrofit in-service airplanes. Although one Service Bulletin exists that addresses provisions for one of the three proposed sensors, no other elements of the proposed modification are addressed in an existing Bulletin. It should be noted that the OEM's preliminary analysis in the development of a generic Bulletin has revealed that a significantly greater number of B737s than projected in the NPRM would require a new FDAU or FDR in order to comply with proposed requirements, indicating the technical complexity and unknowns of the proposed modifications.

If any further information is required, please call me at (202) 626-4036/4019.

Sincerely,



Joseph W. White

Director, Aircraft Systems Engineering
Air Transport Association
1301 Pennsylvania Avenue, NW
Suite 1100
Washington, DC 20004-1707

Cc: Ms. E. Erickson, AIR-1
Mr. R. Wojnar, AIR-2
Mr. J. Hickey, ANM-100
Mr. G. Kaseote, AIR-1 30
C. Hallett
R. Frenzel
EMMC
AEC
9-NPRM-CMTS@faa.gov